

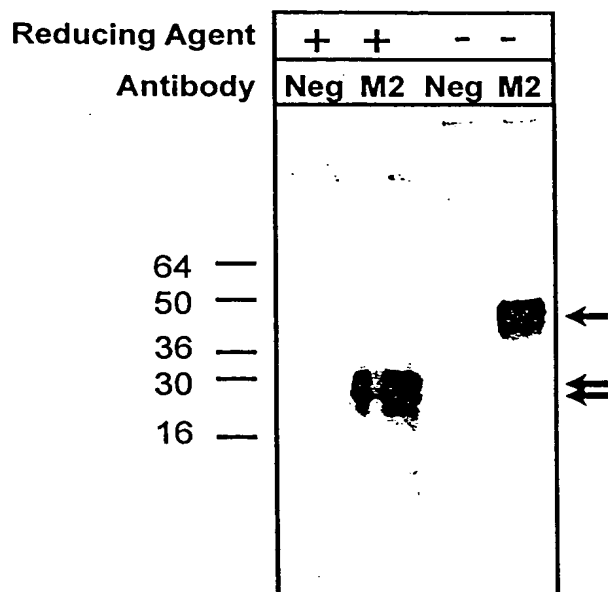
Fig. 1

ORFV2-VEGF	M	-	-	-	-	-	-	-	-	-	K	L	L	V	G	I	L	V	A	V	C	L	H	Q	Y	L	L	N	A	D	S	N	T	K	G	-	W	S	-	-	28		
VEGF-121	M	-	-	-	-	-	-	-	-	-	N	F	L	L	S	W	V	H	W	S	-	L	-	-	A	L	L	L	-	-	Y	L	H	H	A	K	W	S	Q	A	26		
VEGF-165	M	-	-	-	-	-	-	-	-	-	N	F	L	L	S	W	V	H	W	S	-	L	-	-	A	L	L	L	-	-	Y	L	H	H	A	K	W	S	Q	A	26		
PLGF-152	M	P	V	M	R	L	F	P	C	F	L	Q	L	L	A	G	L	A	L	P	-	A	-	V	P	P	Q	Q	-	-	W	A	L	S	A	G	N	G	S	36			
VEGF-B167	M	-	-	-	-	-	-	-	-	-	S	P	L	L	-	-	-	-	-	-	-	-	-	R	R	L	L	L	-	-	A	A	L	L	Q	L	A	P	A	20			
VEGF-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H	N	R	E	Q	A	N	L	N	S	R	T	103
VEGF-D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	D	S	R	S	A	S	H	R	S	T	R	88
ORFV2-VEGF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47		
VEGF-121	A	P	M	A	E	G	G	G	Q	N	H	H	-	E	V	V	K	F	M	D	-	V	Y	Q	R	S	Y	C	H	P	I	E	T	L	V	D	I	F	Q	E	64		
VEGF-165	A	P	M	A	E	G	G	G	Q	N	H	H	-	E	V	V	K	F	M	D	-	V	Y	Q	R	S	Y	C	H	P	I	E	T	L	V	D	I	F	Q	E	64		
PLGF-152	-	-	-	-	-	-	-	-	-	-	-	-	-	E	V	V	V	F	F	Q	E	-	V	W	G	R	S	Y	C	R	A	L	E	R	L	V	D	V	S	E	64		
VEGF-B167	A	P	V	S	Q	P	D	A	P	G	H	Q	R	K	V	V	S	W	I	D	-	V	Y	T	R	A	T	Q	C	Q	P	R	E	V	V	P	L	T	V	E	59		
VEGF-C	E	E	T	I	K	F	A	A	A	H	Y	N	T	E	I	L	K	S	I	D	N	E	W	R	K	T	Q	C	M	P	R	E	V	C	I	D	V	G	K	E	143		
VEGF-D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	123		
ORFV2-VEGF	T	H	P	E	L	T	S	O	R	F	N	P	P	C	V	T	L	M	R	C	G	G	C	C	N	D	E	S	L	E	C	V	P	T	E	E	V	N	V	T	87		
VEGF-121	-	Y	P	D	E	I	E	Y	I	F	K	P	S	C	V	P	L	M	R	C	G	G	C	C	N	D	E	G	L	E	C	V	P	T	E	E	S	N	I	T	103		
VEGF-165	-	Y	P	D	E	I	E	Y	I	F	K	P	S	C	V	P	L	M	R	C	G	G	C	C	N	D	E	G	L	E	C	V	P	T	E	E	S	N	I	T	103		
PLGF-152	-	Y	P	D	E	I	E	Y	I	F	K	P	S	C	V	P	L	M	R	C	G	G	C	C	N	D	E	G	L	E	C	V	P	T	E	E	S	N	I	T	103		
VEGF-B167	L	M	G	-	T	V	A	K	Q	L	V	P	S	C	V	T	V	Q	R	C	G	G	C	C	P	D	D	G	L	E	C	V	P	T	G	Q	H	Q	V	R	98		
VEGF-C	-	F	G	V	A	T	N	T	F	F	K	P	P	C	V	S	V	Y	R	C	G	G	C	C	N	S	E	G	L	Q	C	M	N	T	S	T	S	Y	I	S	182		
VEGF-D	L	-	G	K	S	T	N	T	F	F	K	P	P	C	V	N	V	F	R	C	G	G	C	C	N	E	E	S	L	I	C	M	N	T	S	T	S	Y	I	S	162		
ORFV2-VEGF	M	E	L	L	-	G	A	S	G	S	-	G	S	N	-	G	M	Q	R	L	S	F	V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117		
VEGF-121	M	Q	I	-	M	R	I	K	P	H	Q	G	Q	H	I	G	E	M	-	-	S	F	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	137		
VEGF-165	M	Q	I	-	M	R	I	K	P	H	Q	G	Q	H	I	G	E	M	-	-	S	F	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	137		
PLGF-152	M	Q	I	L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	137			
VEGF-B167	M	Q	I	L	M	I	R	Y	P	S	S	Q	L	-	-	G	E	M	-	-	S	-	L	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	131		
VEGF-C	K	T	L	F	E	I	T	V	P	L	S	Q	G	P	K	P	V	T	I	-	S	F	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218		
VEGF-D	K	Q	L	F	E	I	S	V	P	L	T	S	V	P	E	L	V	P	-	-	V	K	V	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	196		
ORFV2-VEGF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125		
VEGF-121	R	Q	E	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141		
VEGF-165	R	Q	E	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	164		
PLGF-152	K	P	E	R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160		
VEGF-B167	A	V	K	P	D	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160		
VEGF-C	R	Q	V	H	S	I	I	R	R	S	L	P	-	A	T	L	P	Q	C	Q	A	A	N	K	T	C	P	T	N	Y	M	W	N	N	H	I	C	R	C	L	257		
VEGF-D	R	H	P	Y	S	I	I	R	R	S	I	Q	I	P	E	E	D	R	C	S	H	S	K	K	L	C	P	I	D	M	L	W	D	S	N	K	C	K	C	V	236		
ORFV2-VEGF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	133		
VEGF-121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	147		
VEGF-165	C	-	K	N	T	D	S	R	C	K	A	R	Q	L	E	L	N	E	R	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	191		
PLGF-152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170		
VEGF-B167	C	R	R	R	S	F	L	R	C	Q	G	R	G	L	E	L	N	P	D	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	188		
VEGF-C	A	Q	E	D	F	M	F	S	S	D	A	G	D	D	S	T	D	G	F	H	D	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	295		
VEGF-D	L	Q	E	E	-	-	-	N	P	L	A	G	T	E	D	H	S	H	L	Q	E	P	A	L	C	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	273	

ORFV2-VEGF  
VEGF-121  
VEGF-165  
PLGF-152  
VEGF-B167  
VEGF-C  
VEGF-D

Replaced

**Fig. 2A**



**Fig. 2B**

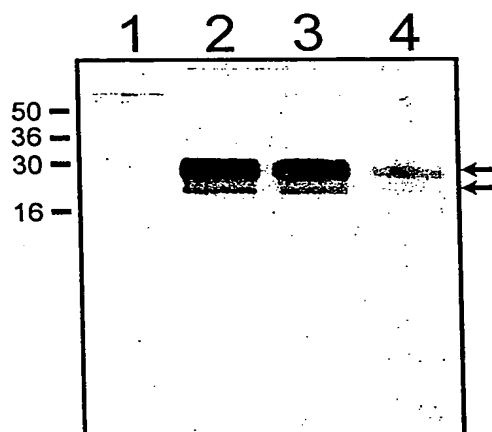


Fig. 3

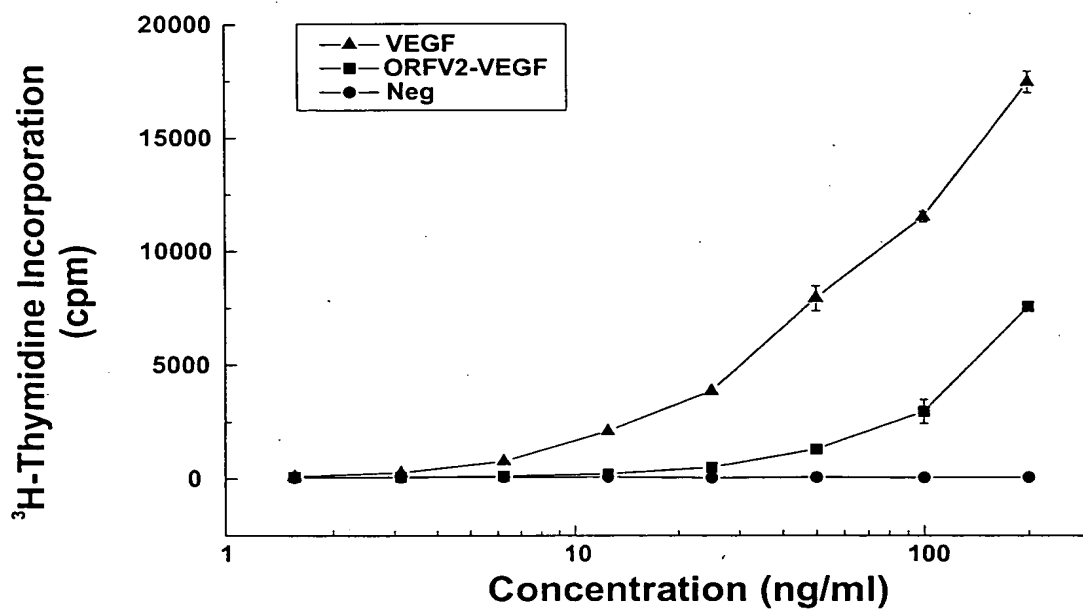


Fig. 4A

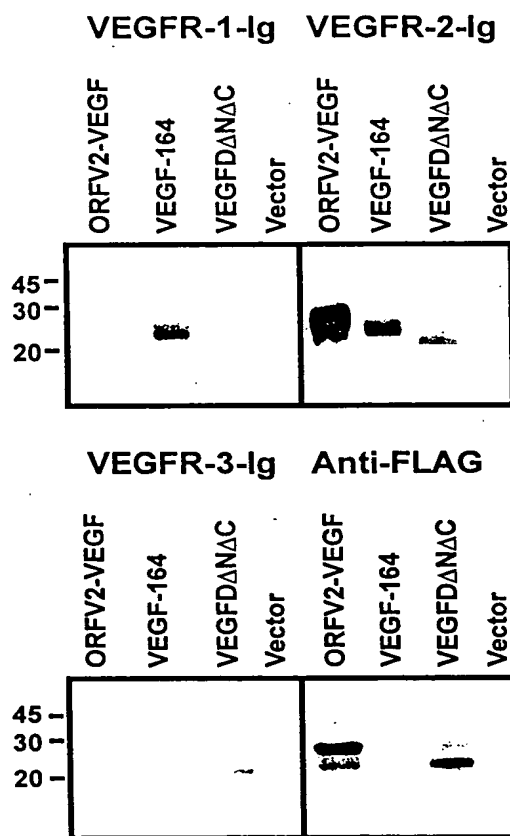


Fig. 4B

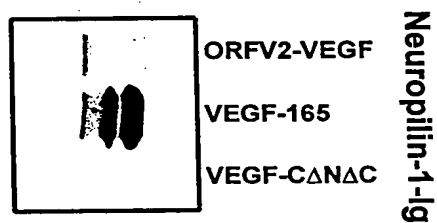


Fig. 5

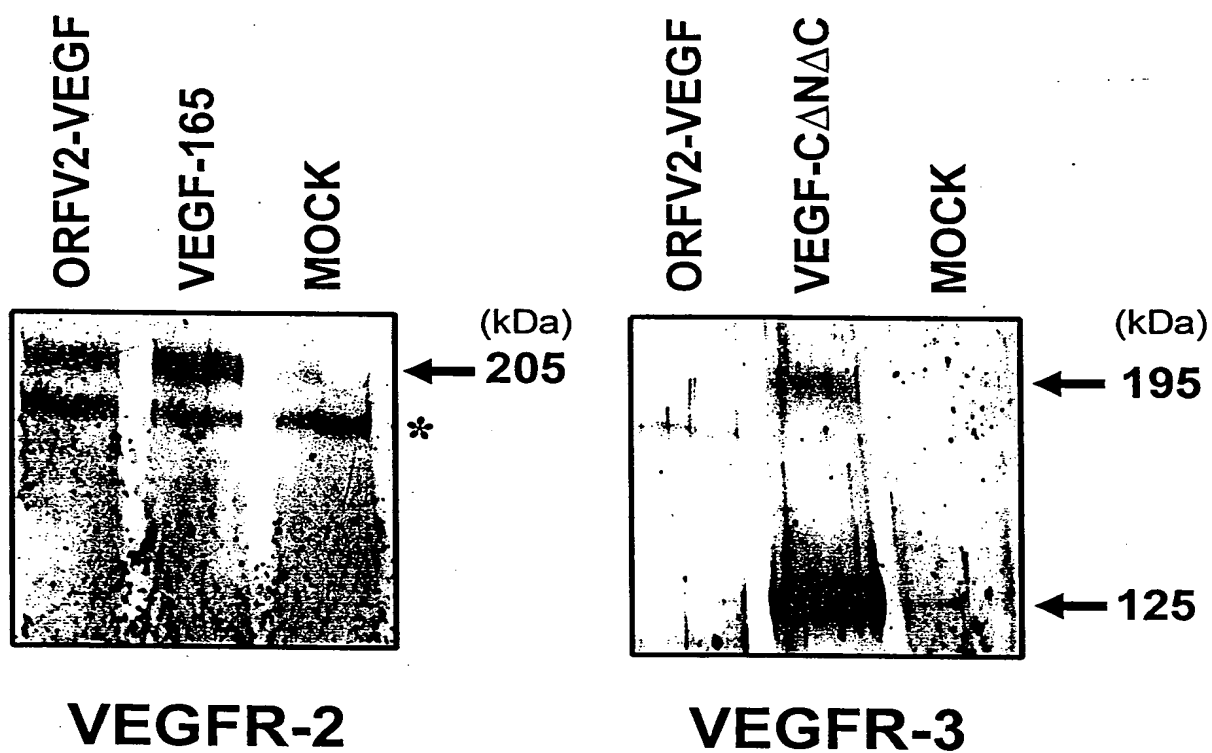


Fig. 6

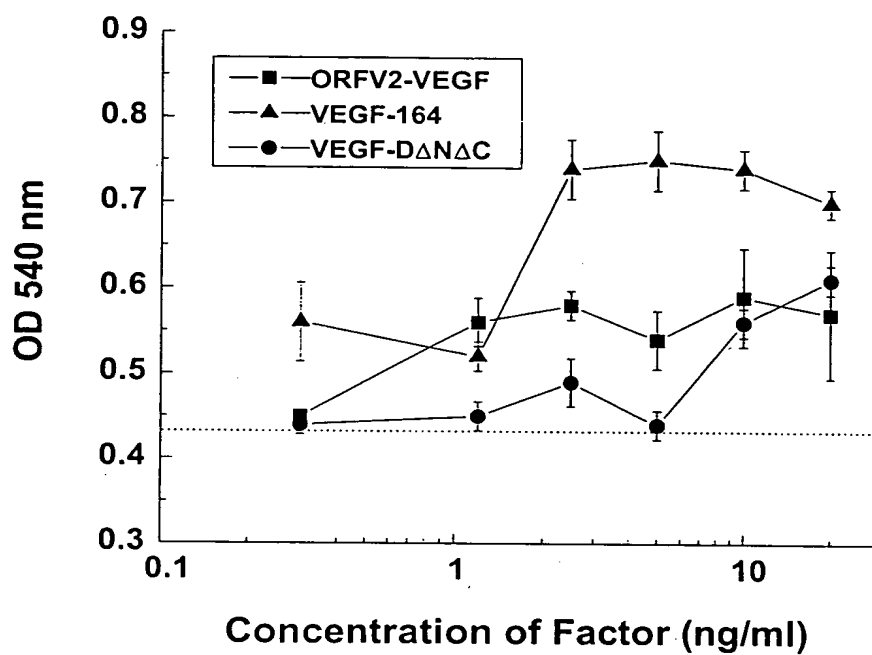


Fig. 7A

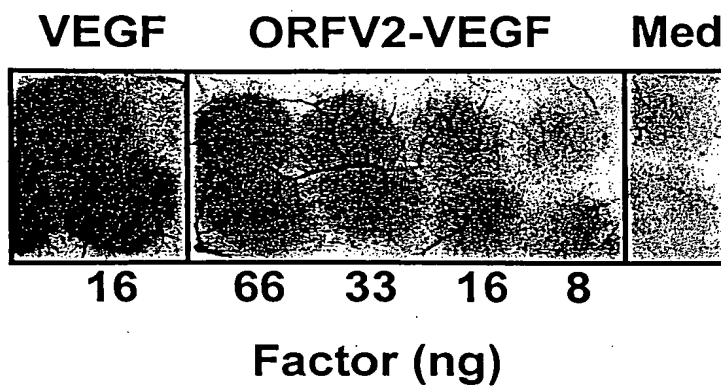
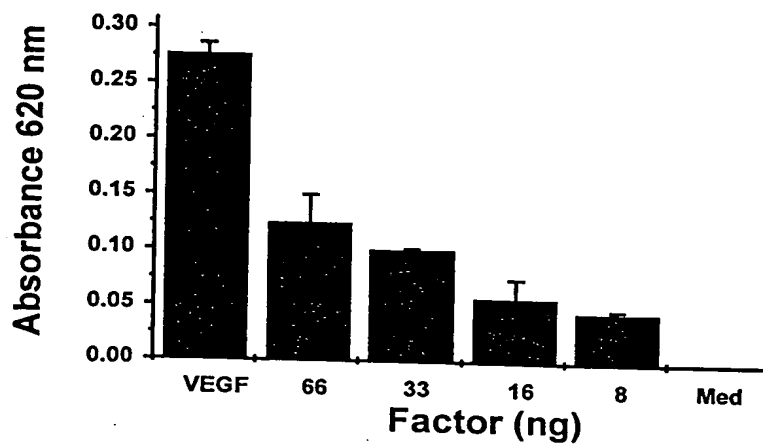


Fig. 7B



**Fig. 8**

ATGAAGTTGCTCGTCGGCATACTAGTAGCCGTGTGCTTGCACCAGTATCTGCTGAACGCGGACAG  
CAACACGAAAGGATGGTCCGAAGTGCTGAAAGGCAGCGAGTGCAAGCCTAGGCCGATTGTTGTTTC  
CTGTAAGCGAGACGCACCCAGAGCTGACTTCTCAGCGGTTCAACCCGCCGTGTGTACAGTTGATG  
CGATGCGGCGGGTGCTGCAACGACGAGAGCTTGGGAATGCGTCCCCACGGAAGAAGTAAACGTGAC  
GATGGAACTCCTGGGGGCGTCGGGCTCCGGTAGTAACGGGATGCAACGTCTGAGCTTCGTAGAGC  
ATAAGAAATGCGATTGTAGACCACGATTACAACCACGCCACCGACGACCACAAGCCGCCCCAGA  
AGACGCCGCTAG

**Fig. 9**

MKLLVGILVAVCLHQYLLNADSNTKGWSEVLKGSECKPRPIVVPVSETHPELTSQRFNPPCVTLM  
RCGGCCNDESLECVPTTEEVNVTMELLGASGSGSNGMQRLSFVEHKKCDCRPRFTTTPPTTTRPPR  
RRR



APPROVED	O.G. FIG.
BY	CLASS SUBCLASS
DRAFTSMAN	

**Fig. 10**

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atgaagttgc tcgtcggcat actggttagcc gtgtgcttgc accagtatct gctgaacgcg 60
gacagcacga aaacatgggc cgaggtgttt gaaagcagta agtgcaagcc aaggccaacg 120
gtcgtttcccg taggcgaggc gcacccagag ctaacttctc agcggttcaa cccgcagtgt 180
gtcacagtga tgcgatgcgg cgggtgctgc aacgacgaga gcttggaatg cgtccccacg 240
gaagaggcaa acgtgacgat gcaactcatg ggggcgtcgg tctccggtgg taacgggatg 300
caacatttga tattcgtaga gcataagaaa tgcgattgta aaccacgact cacaaccacg 360
ccaccgacga ccacaaggcc gcccagaaga cgccgctag 399

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**Fig. 11**

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Met Lys Leu Leu Val Gly Ile Leu Val Ala Val Cys Leu His Gln Tyr
 1              5              10              15

Leu Leu Asn Ala Asp Ser Thr Lys Thr Trp Ser Glu Val Phe Glu Ser
      20              25              30

Ser Lys Cys Lys Pro Arg Pro Thr Val Val Pro Val Gly Glu Ala His
      35              40              45

Pro Glu Leu Thr Ser Gln Arg Phe Asn Pro Gln Cys Val Thr Val Met
      50              55              60

Arg Cys Gly Gly Cys Cys Asn Asp Glu Ser Leu Glu Cys Val Pro Thr
      65              70              75              80

Glu Glu Ala Asn Val Thr Met Gln Leu Met Gly Ala Ser Val Ser Gly
      85              90              95

Gly Asn Gly Met Gln His Leu Ile Phe Val Glu His Lys Lys Cys Asp
      100              105              110

Cys Lys Pro Arg Leu Thr Thr Thr Pro Pro Thr Thr Thr Arg Pro Pro
      115              120              125

Arg Arg Arg Arg
      130

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115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500 505 510 515 520 525 530 535 540 545 550 555 560 565 570 575 580 585 590 595 600 605 610 615 620 625 630 635 640 645 650 655 660 665 670 675 680 685 690 695 700 705 710 715 720 725 730 735 740 745 750 755 760 765 770 775 780 785 790 795 800 805 810 815 820 825 830 835 840 845 850 855 860 865 870 875 880 885 890 895 900 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995